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Before the
Tennessee Regulatory Authority
Docket No. 03-00118

T.R.A. DOCKET ROOM

TENNESSEE-AMERICAN WATER COMPANY

Direct Testimony and Exhibit of

Michael Gorman

On behalf of

Chattanooga Manufacturers Association

Project 7980
May 2003



BRUBAKER & ASSOCIATES, INC.
ST. LOUIS, MO 63141-2000

Before the
Tennessee Regulatory Authority
Docket No. 03-00118

TENNESSEE-AMERICAN WATER COMPANY

Direct Testimony of Michael Gorman

1 **Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A My name is Michael Gorman. My business address is 1215 Fern Ridge Parkway, Suite
3 208, St. Louis, MO 63141-2000.

4 **Q WHAT IS YOUR OCCUPATION?**

5 A I am a consultant in the field of public utility regulation and a Principal in the firm of
6 Brubaker & Associates, Inc., energy, economic and regulatory consultants.

7 **Q PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.**

8 A I have been involved in public utility regulation and utility economic analysis for
9 approximately 20 years. A more detailed description of my work experience and
10 education is included in Appendix A to my testimony.

11 **Q ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?**

12 A I am appearing on behalf of the Chattanooga Manufacturers Association (CMA).
13 Member companies of CMA take large amounts of water from Tennessee-American
14 Water Company (TAWC or Company), and their costs of water will be significantly
15 increased by TAWC's proposed rate increase.

1 Q WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY IN THIS PROCEEDING?

2 A I will recommend adjustments to TAWC's cost of service and proposed rate design.

3 Q PLEASE SUMMARIZE YOUR RECOMMENDATIONS IN THIS PROCEEDING.

4 A My recommendations are summarized as follows:

- 5 1. TAWC's rates must be competitive to attract new and retain existing high volume
6 customers. As such, TAWC's service quality and competitive pricing are key
7 factors to the Chattanooga community's business infrastructure and economic
8 development initiatives.
- 9 2. To keep TAWC's rates competitive, it must minimize its revenue requirement
10 through assertive and aggressive cost management, and it must allocate its cost
11 of service (COS) among its customers in accordance with how it incurs costs for
12 providing service to each customer. Efficiency in cost management and cost
13 allocation and rate design will help ensure that TAWC's prices are competitive
14 and that it is able to successfully contribute to the economic development of its
15 service territory.
- 16 3. I find TAWC's cost of service to be generally reasonable, but I am recommending
17 several adjustments to be consistent with Tennessee Regulatory Authority (TRA)
18 orders, and to more accurately assign TAWC's cost of purchased power and
19 small mains among its customer classes.
- 20 4. TAWC's proposal to reallocate 75% of its fire hydrant service is inconsistent with
21 the TRA order and should be rejected. Consistent with the TRA Order in Docket
22 No. 99-00891, TAWC should absorb the cost of public fire hydrant service above
23 the price approved by the TRA.
- 24 5. TAWC has an agreement with the City of Chattanooga not to increase its fire
25 hydrant rates. TAWC's estimated revenue deficiency to other classes will be
26 reduced from \$3,829,966 or 12.6%, to \$2,724,956 or 8.95% if fire hydrant costs
27 above TAWC rates are not reallocated to other classes. The impact of this
28 increase to each of the rate classes is as shown on my Exhibit MPG-1, Schedule
29 1. Note that this schedule does not reflect all of my proposed adjustments to the
30 Company's cost of service study. This adjustment shows only the modification to
31 remove the Company's proposal to reallocate public fire hydrant costs to other
32 classes.
- 33 6. Based on all of my proposed adjustments to TAWC's allocated cost of service
34 study, I recommend TAWC increase its rates to its customer groups as shown on
35 the attached Exhibit MPG-1, Schedule 2, Page 1. (Note that I am not endorsing
36 TAWC's proposed revenue requirement. Rather, I am using it in my schedule for
37 illustrative purposes only.)
38

- 1 7. TAWC's cost of service study misallocated its cost of purchased power and small
2 mains between classes. As discussed below, a more reasonable allocation of
3 these costs will change the distribution of each classes' cost of service.
- 4 8. To the greatest extent possible, I recommend that no class that is currently
5 priced above TAWC's cost of service receive a rate increase in this proceeding.
6 As shown on the attached Exhibit MPG-1, Schedule 2, Page 1, the only classes
7 that should receive a rate increase in this proceeding are the residential class
8 and the other public authority class. Note that the percent increase listed for
9 these classes is based on TAWC's proposed revenue requirement. If the TRA
10 accepts other parties' proposed reductions to TAWC's revenue requirement, then
11 the increase for these respective classes would decline.
- 12 9. I propose rates to accomplish my proposed allocation of TAWC's claimed
13 revenue deficiency as shown on my Exhibit MPG-1, Schedule 3.

14 **Q PLEASE EXPLAIN WHY TAWC SHOULD PROVIDE HIGH QUALITY, RELIABLE**
15 **SERVICE AT COMPETITIVE PRICES.**

16 **A** TAWC must offer high quality, competitively priced services because many of its large
17 volume users have alternative sources of supply that compete with TAWC. For
18 example, many of TAWC's large industrial companies can use or expand well water
19 supply for process water uses. Further, other industrial companies will quickly explore
20 competitive alternatives if TAWC's prices are rendered non-competitive due to the
21 Company's poor cost management practices, or if rates designed for large industrial
22 companies subsidize other customer classes.

23 Large industrial companies would not do this out of spite, but are rather forced to
24 aggressively manage production costs in order to remain competitive in their own
25 marketplaces. Indeed, wholesale prices have been increasing by less than 1.6% per
26 year over the last three years. With minimal wholesale price increases for their
27 products, industrial companies have tremendous difficulty absorbing increases to their
28 costs of production and meet required margins. Because of the industrial companies'
29 competitive requirement to successfully control production costs, TAWC must be

1 successful in managing its costs, and its rates must be adjusted to ensure that each
2 customer pays only its fair share of TAWC's cost of service.

3 **Q BEFORE YOU DESCRIBE YOUR ADJUSTMENTS TO THE COMPANY'S COST**
4 **STUDY, PLEASE EXPLAIN HOW YOU MADE YOUR PROPOSED ALTERNATIVE**
5 **COST ALLOCATIONS IN YOUR SCHEDULE 1 AND SCHEDULE 2 ATTACHED TO**
6 **YOUR TESTIMONY.**

7 **A** These schedules were derived by starting with TAWC witness Herbert's cost of service
8 model which is attached to his testimony, in an exhibit titled "Cost of Service Allocation
9 Study as of July 31, 2002 and Proposed Customer Rates." In my Exhibit MPG,
10 Schedule 1, I adjust Mr. Herbert's cost study to reverse the reallocation of 75% of public
11 fire protection costs to other classes. In my Schedule 2, I reflect all my proposed
12 adjustments to Mr. Herbert's cost of service study, including:

- 13 1. The reallocation of public fire protection costs,
14 2. Adjusted allocation of purchased power costs, and
15 3. Adjusted allocation of small main costs.

16 **Q PLEASE EXPLAIN TAWC'S PROPOSAL TO REALLOCATE PUBLIC FIRE**
17 **PROTECTION COST.**

18 **A** TAWC reallocated \$1.105 million of costs initially allocated to public fire protection
19 service to the residential, commercial, industrial and other public authority classes as
20 shown on TAWC witness Paul R. Herbert's Schedule B, Page 7. Based on TAWC
21 witness Michael Miller's direction, the cost for public fire protection service was capped
22 at 25% of its cost of service. The remaining 75% then was reallocated among the
23 classes identified above, based on total cost of service. TAWC is proposing to increase

1 its fire hydrant rate from \$50.00 per hydrant to \$71.93 per hydrant (Miller direct at 11-
2 13).

3 **Q IS THE COMPANY'S PROPOSED ALLOCATION OF 75% OF ITS COST OF PUBLIC**
4 **FIRE PROTECTION SERVICE REASONABLE?**

5 **A** No. The Company's proposal is inconsistent with the TRA's order in Docket No. 99-
6 00891. In that docket the TRA approved a reduced tariff rate for TAWC's fire hydrant
7 charges to the City of Chattanooga as part of a settlement agreement between the City
8 of Chattanooga and TAWC.

9 The TRA agreed to reduce the City's fire hydrant charge from \$301.20 to \$50.00.
10 This reduction was phased in over the period December 31, 1999 through December 31,
11 2001. The total reduced revenues resulting from the reduced fire hydrant charge was
12 estimated to be \$1,127,964.

13 In that TRA order, it was clear that the Company agreed to accept the loss of this
14 revenue without passing this cost back to customers.

15 For example, in Footnote 6 to the Order, it states as follows:

16 "In this instance, lost revenues attributed to this tariff filing
17 would be imputed into the Company's subsequent rate
18 filings, thus reflecting the Company's and stockholders'
19 decision to absorb the contribution loss." (Id at 3)
20 (Emphasis added)

21 Further, in its ordering paragraph the Commission stated as follows:

22 "2. The loss contribution to Tennessee-American Water
23 Company resulting from the reduction in fire hydrant
24 charges, along with any expenses incurred as a result of
25 the underlying litigation with the City of Chattanooga shall
26 be borne, in full, by the stockholders of Tennessee-
27 American Water Company.

28 3. The Company's ratepayers should not at any time, through
29 increases in rates, fees, schedules, or otherwise, bear any
30 of the costs resulting from this tariff filing by Tennessee-

1 American Water Company to voluntarily reduce its fire
2 hydrant charges to the City of Chattanooga.” (Emphasis
3 added)

4 Based on this clear commitment by the Company, and the approval by the TRA,
5 the lost revenue created by the lower fire hydrant charges to the City of Chattanooga
6 should not be reallocated among TAWC's other customers. The Company agreed to
7 absorb this revenue loss and should not be allowed to repudiate this commitment.

8 **Q WHAT WOULD BE THE IMPACT ON TAWC'S COST OF SERVICE AND CLASS**
9 **RATE INCREASES IF THIS REALLOCATION OF PUBLIC FIRE PROTECTION**
10 **COSTS WAS REVERSED?**

11 A If TAWC limits the increase to public fire protection to \$368,375, and is not allowed to
12 pass back the reallocation of the difference between what it charges fire protection
13 service in its cost of service, then its revenue increase in this proceeding will decrease
14 from \$3,829,966 to \$2,724,944. The resulting impact on each class's cost of service is
15 shown on my Exhibit MPG – 1, Schedule 1.

16 **Q HOW DID TAWC ALLOCATE ITS PURCHASED POWER EXPENSES AMONG ITS**
17 **CLASSES?**

18 A TAWC allocated its purchased power expense using Factor No. 1 as derived in TAWC
19 witness Herbert's cost of service study. Factor No. 1 allocates this cost among customer
20 classes on the basis of average daily consumption.

1 Q PLEASE DESCRIBE WHY MR. HERBERT'S USE OF FACTOR NO. 1 TO ALLOCATE
2 PURCHASED POWER EXPENSE IS UNREASONABLE.

3 A TAWC should allocate its purchased power expense in a manner that reasonably
4 resembles how it procures purchased power. Power is procured based on demand and
5 energy charges. Demand costs are tied to billing demand and demand charges. Energy
6 costs are based on the amount of energy consumed each hour, and the energy charge.

7 For example, consider the Electric Power Board of Chattanooga's (EPB) General
8 Power rate. The EPB charges for power based on a customer charge, demand charge,
9 energy charge and facilities rental charge. The customer charge is based on a monthly
10 charge tied to the number of services the Company incurs. The demand charge is
11 based on the maximum 30-minute average demand measured within each month and
12 the demand charge. The energy charge is based on the amount of energy consumed
13 each hour. The monthly Facilities Charge is based on billing demand measured as the
14 highest annual 30-minute demand of the preceding year and the facilities charge.

15 TAWC's purchased power demands are tied to its consumers demand for water.
16 When water demand goes up, its pumping increases, thus increasing its purchased
17 power demand. Consequently, TAWC's cost of purchased power demand is based on
18 its customers' maximum hour demand for water. Similarly, the amount of energy TAWC
19 uses is a function of how often the pumps run, and is then directly tied to the average
20 volume of water supplied to customers.

21 Consequently, TAWC's cost of purchased power is not based only on its flow of
22 water, but rather is highly correlated with both the variation of its customers' maximum
23 hour demands and water flow. That is, the maximum hour demand drives the purchased
24 power billing units, and the average flow drives purchased power energy consumption.

1 Q DID TAWC WITNESS HERBERT DERIVE ALLOCATION FACTORS WHICH WOULD
2 EXPLICITLY ALLOCATE PURCHASED POWER DEMAND COSTS AND
3 PURCHASED POWER ENERGY COSTS SEPARATELY BETWEEN THE CLASSES?

4 A No. Also, Mr. Herbert's cost study did not break out the Company's purchased power
5 costs by demand and energy components. Therefore, a correct allocation of purchased
6 power demand costs between customer classes is not possible. Therefore, I propose to
7 use an allocation factor derived by Mr. Herbert that most reasonably allocates purchased
8 power costs (demand and energy) among customer classes.

9 Q WHICH FACTOR THEN WOULD BE APPROPRIATE FOR ALLOCATING TAWC'S
10 PURCHASED POWER EXPENSE BETWEEN CLASSES?

11 A Purchased power expense is more appropriately allocated using Mr. Herbert's allocation
12 Factor 4, rather than his Factor 1. Mr. Herbert's Factor 4 considers average hour
13 consumption and maximum hour demand. Average hourly consumption is an
14 appropriate means of allocating customer and energy charges. Maximum hour
15 consumption is an appropriate means of allocating the facilities rental charges and
16 demand charge components of purchased power. Also, Factor 4 allocates an
17 appropriate amount of the purchased power expense to fire protection as this service
18 also impacts TAWC's maximum hour demand and annual system loads.

19 For these reasons, I recommend using Factor 4 to allocate purchased power
20 expense, rather than Factor 1 as used by Mr. Herbert.

21 Q HOW DID TAWC WITNESS HERBERT ALLOCATE SMALL MAINS?

22 A Mr. Herbert allocated all of his mains using Factor No. 4, as shown on his Schedule B,
23 Page 6 and Schedule C, Page 21. As shown on Mr. Herbert's Schedule C, Page 5,

Factor 4 allocation is based on average hour consumption, maximum hour extra capacity, and fire protection.

Q PLEASE DESCRIBE YOUR PROPOSED ADJUSTMENT TO MR. HERBERT'S ALLOCATION OF SMALL MAINS?

A I propose the use of a different allocation factor to allocate: (1) T&D mains not classified, and (2) T&D mains (4 inches or less). Rather than use Factor 4 as proposed by Mr. Herbert, I recommend using Mr. Herbert's Factor 11 – Allocation of Costs Associated with Services.

Q WHY DO YOU RECOMMEND ALLOCATING SMALL MAINS USING FACTOR 11 RATHER THAN FACTOR 4?

A Small mains are not used by all of TAWC's customers because many of TAWC's larger customers take service directly off mains of 4 inches or larger. Therefore, TAWC's small mains should not be allocated among all rate classes in proportion to average and maximum day demands as TAWC proposes. TAWC's allocation assigns a large percentage of the cost of small mains to customers who do not use these assets.

The services allocation factor (Factor 11) better describes the number of customers that use the small main than does Factor 4. As shown on Mr. Herbert's Schedule C, Page 16, the percentage of TAWC services are for meter sizes 3/4" and 1", and 1.5". These services are most likely receiving water from a main of 4" or smaller, than is a service with a meter size of 2" through 12". Further, the small mains are more similar to service lines than they are actual transmission mains. As shown on Mr. Herbert's Schedule C, Page 16, the number of customers that actually take service from

1 these smaller mains is more heavily weighted with residential and commercial customers
2 than it is with industrial customers as evidenced by service meter size.

3 Consequently, Factor 11 allocates a greater percentage of the costs of these
4 small mains to residential and commercial customers, and a lower percentage to the
5 industrial customers. The allocation is tied to the size of the service, which is the best
6 factor derived by Mr. Herbert to assign the small main costs to the customers that
7 actually use them. Thus, Factor 11 more appropriately allocates these costs among the
8 customers that TAWC made these small mains investments to serve.

9 **Q HOW WOULD MR. HERBERT'S COST OF SERVICE STUDY BE IMPACTED, IF ALL**
10 **OF YOUR RECOMMENDATIONS ADJUSTMENTS ARE MADE TO IT?**

11 A I have made all of the adjustments I am recommending to Mr. Herbert's class cost of
12 service study and attached them to my testimony on Exhibit MPG-1, Schedule 2.

13 **Q HOW DO YOU RECOMMEND THE COMMISSION ADJUST RATES IN ORDER TO**
14 **PRODUCE THE CLASS REVENUE DEFICIENCIES YOU HAVE ESTIMATED ON**
15 **YOUR EXHIBIT MPG-1, SCHEDULE 2?**

16 A To the greatest extent possible, I recommend only the classes whose current rates do
17 not meet TAWC's full cost of service receive a rate increase in this proceeding. The two
18 classes that should receive a rate increase include the residential, and other public
19 authority classes. Note, I set public fire protection service revenue requirements at that
20 proposed by TAWC.

1 Q ARE YOU PROPOSING RATES THAT ACCOMPLISH THIS CLASS REVENUE
2 INCREASE PROPOSAL?

3 A Yes. Attached as Exhibit MPG-1, Schedule 3, are proposed rates, and proof of revenue
4 which approximately increase the class revenue requirements in accordance with my
5 revision to TAWC's cost of service shown on my Schedule 2.

6 Q BASED ON YOUR PROPOSED RATES, THE RESIDENTIAL CLASS WILL RECEIVE
7 AN INCREASE OF 19.3%. IS THIS PERCENTAGE INCREASE TOO HIGH FOR THE
8 RESIDENTIAL CLASS?

9 A My proposed 19.3% increase to residential class is not significantly higher than the
10 Company's proposed increase of 16.1%. Also, a 19.3% increase is approximately 150%
11 of the system average increase. Given the infrequency of TAWC rate filings, this level of
12 increase for the residential class is reasonable.

13 Q DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

14 A Yes, it does.

Qualifications of Michael Gorman

1 **Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A Michael P. Gorman. My business mailing address is P. O. Box 412000, 1215 Fern
3 Ridge Parkway, Suite 208, St. Louis, Missouri 63141-2000.

4 **Q PLEASE STATE YOUR OCCUPATION.**

5 A I am a consultant in the field of public utility regulation and a principal at Brubaker &
6 Associates, Inc., energy, economic and regulatory consultants.

7 **Q PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND WORK
8 EXPERIENCE.**

9 A In 1983 I received a Bachelors of Science Degree in Electrical Engineering from
10 Southern Illinois University, and in 1986, I received a Masters Degree in Business
11 Administration with a concentration in Finance from the University of Illinois at
12 Springfield. I have also completed several graduate level economics courses.

13 In August of 1983, I accepted an analyst position with the Illinois Commerce
14 Commission (ICC). In this position, I performed a variety of analyses for both formal and
15 informal investigations before the ICC, including: marginal cost of energy, central
16 dispatch, avoided cost of energy, annual system production costs, and working capital.
17 In October of 1986, I was promoted to the position of Senior Analyst. In this position, I
18 assumed the additional responsibilities of technical leader on projects, and my areas of
19 responsibility were expanded to include utility financial modeling and financial analyses.

20 In 1987, I was promoted to Director of the Financial Analysis Department. In this
21 position, I was responsible for all financial analyses conducted by the staff. Among other
22 things, I conducted analyses and sponsored testimony before the ICC on rate of return,

1 financial integrity, financial modeling and related issues. I also supervised the
2 development of all Staff analyses and testimony on these same issues. In addition, I
3 supervised the Staff's review and recommendations to the Commission concerning utility
4 plans to issue debt and equity securities.

5 In August of 1989, I accepted a position with Merrill-Lynch as a financial
6 consultant. After receiving all required securities licenses, I worked with individual
7 investors and small businesses in evaluating and selecting investments suitable to their
8 requirements.

9 In September of 1990, I accepted a position with Drazen-Brubaker & Associates,
10 Inc. In April 1995 the firm of Brubaker & Associates, Inc. (BAI) was formed. It includes
11 most of the former DBA principals and Staff. Since 1990, I have performed various
12 analyses and sponsored testimony on cost of capital, cost/benefits of utility mergers and
13 acquisitions, utility reorganizations, level of operating expenses and rate base, cost of
14 service studies, and analyses relating industrial jobs and economic development. I also
15 participated in a study used to revise the financial policy for the municipal utility in
16 Kansas City, Kansas.

17 At BAI, I also have extensive experience working with large energy users to
18 distribute and critically evaluate responses to requests for proposals (RFPs) for electric,
19 steam, and gas energy supply from competitive energy suppliers. These analyses
20 include the evaluation of gas supply and delivery charges, cogeneration and/or
21 combined cycle unit feasibility studies, and the evaluation of third-party asset/supply
22 management agreements. I have also analyzed commodity pricing indices and forward
23 pricing methods for third party supply agreements. Continuing, I have also conducted
24 regional electric market price forecasts.

1 In addition to our main office in St. Louis, the firm also has branch offices in
2 Corpus Christi, Texas; Plano, Texas; Asheville, North Carolina; Denver, Colorado; and
3 Chicago, Illinois.

4 **Q HAVE YOU EVER TESTIFIED BEFORE A REGULATORY BODY?**

5 A Yes. I have sponsored testimony on cost of capital, revenue requirements, cost of
6 service and other issues before the Federal Energy Regulatory Commission and state
7 regulatory commissions in Arizona, Colorado, Delaware, Florida, Georgia, Illinois,
8 Indiana, Iowa, Michigan, Missouri, New Mexico, New York, Oklahoma, South Carolina,
9 Tennessee, Texas, Utah, Vermont, West Virginia, Wisconsin and Wyoming. I have also
10 sponsored testimony before the Commission of Public Utilities in Kansas City, Kansas;
11 presented rate setting position reports to the regulatory Commission of the municipal
12 utility in Austin, Texas, and Salt River Project, Arizona, on behalf of industrial customers;
13 and negotiated rate disputes for industrial customers of the Municipal Electric Authority
14 of Georgia in the LaGrange, Georgia district.

15 **Q PLEASE DESCRIBE ANY PROFESSIONAL REGISTRATIONS OR ORGANIZATIONS**
16 **TO WHICH YOU BELONG.**

17 A I earned the designation of Chartered Financial Analyst (CFA) from the Association for
18 Investment Management and Research (AIMR). The CFA charter was awarded after
19 successfully completing three examinations which covered the subject areas of financial
20 accounting, economics, fixed income and equity valuation and professional and ethical
21 conduct. I am a member of AIMR's Financial Analyst Society.
22

TENNESSEE-AMERICAN WATER COMPANY

COMPARISON OF PRO FORMA COST OF SERVICE WITH REVENUES UNDER PRESENT AND PROPOSED RATES
FOR THE TWELVE MONTHS ENDED JULY 31, 2002

ADJUSTED TO REMOVE REALLOCATED PUBLIC FIRE HYDRANT COST

Customer Classification (1)	Pro Forma Cost of Service, as of 7/31/2002		Pro Forma Revenues Under Present Rates		Pro Forma Revenues (Under)/Over Costs	
	Amount (2)	Percent of Total (3)	Amount (4)	Percent of Total (5)	Amount (6)	Percent Inc. to Cost (7)
Residential	\$15,635,446	47.2%	\$12,026,923	41.0%	\$3,608,523	30.0%
Commercial	8,507,306	25.7%	9,180,456	31.3%	-\$673,150	-7.3%
Industrial	3,658,461	11.1%	3,537,807	12.1%	\$120,654	3.4%
Other Public Authority	2,466,274	7.4%	2,345,806	8.0%	\$120,468	5.1%
Other Water Utilities	936,299	2.8%	856,218	2.9%	\$80,081	9.4%
Private Fire Protection	473,962	1.4%	1,117,875	3.8%	-\$643,913	-57.6%
Public Fire Protection	1,473,347	4.4%	256,049	0.9%	\$1,217,298	475.4%
Total Sales of Water	33,151,095	100.0%	29,321,134	100.0%	3,829,961	13.1%
Other Water Revenues	1,125,076		1,125,076			
Total	\$34,276,171		\$30,446,210		\$4,955,037	

Exhibit 1

TENNESSEE-AMERICAN WATER COMPANY

COMPARISON OF PRO FORMA COST OF SERVICE WITH REVENUES UNDER PRESENT AND PROPOSED RATES
FOR THE TWELVE MONTHS ENDED JULY 31, 2002

Adjusted to: Remove Reallocated Public Fire Hydrant Cost, and Change Allocation of Purchased Power Expense and Small Mains Costs

Customer Classification (1)	Pro Forma Cost of Service, as of 7/31/2002		Pro Forma Revenues Under Present Rates		Pro Forma Revenues Under Proposed Rates		CMA Recommended Increase Allocation	
	Amount	Percent of Total	Amount	Percent of Total	Amount	Percent of Total	Amount	Percent Increase
	-2	-3	-4	-5	-6	-7	-8	-9
Residential	\$16,055,667	48.4%	\$12,026,923	41.0%	\$14,553,907	45.4%	\$2,526,984	21.0%
Commercial	8,410,813	25.4%	9,180,456	31.3%	9,180,456	28.7%	0	0.0%
Industrial	3,407,655	10.4%	3,537,807	12.1%	3,537,807	10.9%	0	0.0%
Other Public Authority	2,412,797	7.3%	2,345,806	8.0%	2,412,797	7.5%	66,991	2.9%
Other Water Utilities	827,299	2.5%	856,218	2.9%	856,218	2.7%	0	0.0%
Private Fire Protection	542,573	1.6%	1,117,875	3.8%	1,117,875	3.5%	0	0.0%
Public Fire Protection	1,495,040	4.5%	256,049	0.9%	365,375	1.1%	109,326	42.7%
Total Sales of Water	33,151,844	100.1%	29,321,134	100.0%	32,024,435	99.8%	2,703,301	9.2%
Other Water Revenues	1,125,076		1,125,076		32,024,435		0	0.0%
Total	\$34,276,920		\$30,446,210		\$65,173,946		\$2,703,301	8.9%

Exhibit 2

TENNESSEE-AMERICAN WATER COMPANY
ALLOCATION OF COST OF SERVICE TO CUSTOMER CLASSIFICATIONS
FOR THE TWELVE MONTHS ENDED JULY 31, 2002

Account Number	Account Description	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Other Public Authority	Other Water Utilities	Private Fire Protection	Public Fire Protection
-1	-2	-3	-4	-5	-6	-7	-8	-9	-10	-11
OPERATION AND MAINTENANCE EXPENSES										
Source of Supply										
—Operation—										
6011	Operating Labor	2	\$4	\$1	\$1		\$0	\$0	\$0	\$0
6011	Operating Expense	2	234	77	69	47	22	17	0	1
6101	Purchased Water	2	17,551	5,813	5,179	3,547	1,675	1,267	19	40
—Maintenance—										
6202	Structures and Improvements	2	106,402	35,881	31,868	21,887	10,342	7,946	119	249
	Subtotal Source of Supply		126,201	41,772	37,217	25,462	12,039	9,250	138	290
Power and Pumping Expenses										
—Operation—										
6011	Gen Sup & Eng Lab Oper PU	6	182,560	60,208	53,654	34,832	17,343	12,104	1,497	2,921
6011	Labor Oper PU	6	807,716	266,385	237,388	154,112	76,733	53,552	6,623	12,923
6151	Purch Power PU	4	1,375,606	524,106	467,568	317,010	151,317	0	32,739	62,865
6152	Purch Power PU - Lookout Mtn. Tariff	19	139,029	114,546	19,881	0	4,602	0	0	0
6153	Purch Power PU - Lakeview Tariff	20	35,479	29,231	5,897	0	351	0	0	0
6161	Fuel For Power Production	1	1,343	417	384	305	124	106	2	4
6201	MISC PUMPING EXPENSES-CURRENT	6	643	212	189	123	61	43	5	10
6501	SS & PUMP TRANSPORTATION	6	40	13	12	8	4	3	0	1
6751	MISC PUMPING EXP ELECTRIC	6	2,885	885	789	512	255	176	22	43
	Subtotal Power and Pumping		2,545,101	966,004	785,762	326,902	250,790	65,986	40,888	76,767
Water Treatment Expenses										
—Operation—										
6013	Wt Operation Superv & Eng	2	167,848	55,558	49,498	33,905	16,013	12,303	185	386
6013	General Wt Labor	2	36	12	11	7	3	3	0	0
6183	General Chemicals	1	740,531	228,935	211,792	168,028	68,469	58,650	1,259	2,370
6203	Misc Wt Expenses-Current	2	14,802	4,899	4,365	2,990	1,412	1,085	16	34
6353	Other Wt Oper Contract Services	2	51,349	16,987	15,143	10,372	4,899	3,764	56	118
6413	Wt Rents	2	16,988	5,626	5,013	3,434	1,622	1,246	19	38
6503	Wt Oper Transportation	2	339	112	100	68	32	25	0	1
6753	Waste Disposal Exp (Cur)	1	130,151	40,412	37,223	28,531	12,039	10,308	221	416
6753	General Wt Expenses	2	59,612	19,732	17,580	12,042	5,687	4,370	66	137
6753	Misc Wt Expenses-Current	2	51,775	17,138	15,268	10,459	4,939	3,795	57	119
—Maintenance—										
6204	Or Mn Wt Struct & Imp Mat	2	26,787	8,866	7,899	5,411	2,555	1,953	29	62
6354	Other Wt Maint Contract Services	2	15,946	5,278	4,702	3,221	1,521	1,169	18	37
6504	Wt Maint Transportation	2	119	39	35	24	11	9	0	0
	Subtotal Water Treatment		1,276,293	404,504	368,629	279,490	119,232	98,690	1,926	3,719

TENNESSEE-AMERICAN WATER COMPANY
ALLOCATION OF COST OF SERVICE TO CUSTOMER CLASSIFICATIONS
FOR THE TWELVE MONTHS ENDED JULY 31, 2002

Account Number	Account Description	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Other Public Authority	Other Water Utilities	Private Fire Protection	Public Fire Protection
-1	-2	-3	-4	-5	-6	-7	-8	-9	-10	-11
Transmission & Distribution Expenses										
—Operation—										
6015	T&D Operation Super & Eng	8	114,014	63,027	31,240	7,616	8,141	718	1,117	2,155
6015	Storage Facilities Labor	5	114	36	32	21	10	7	2	5
6015	Misc Meter Labor	10	553,258	382,647	124,372	13,223	22,462	553	0	0
6155	Maps and Records Labor	7	477,519	177,190	158,069	55,631	51,142	5,989	10,123	19,435
6205	Storage Facilities Expense	5	165	52	47	30	15	11	4	7
6355	Misc T & D Expenses-Current	7	28,881	9,985	8,891	3,129	2,877	336	569	1,063
6415	Other T & D Oper Contract Services	7	135,576	50,289	44,876	15,785	14,520	1,695	2,874	5,518
6505	T&D Rents	8	1,648	911	452	110	118	10	16	31
6755	Td Oper Transportation	8	1,278	706	350	85	91	8	13	24
6755	T&D Lines Expense	7	5,594	2,075	1,852	652	598	70	119	228
6755	Misc Meter Expenses	10	5,099	3,619	1,146	122	207	5	0	0
6755	Misc T&D Expenses-Current	8	87,455	53,873	26,703	6,510	6,958	614	965	1,842
—Maintenance—										
6016	Or Mn T&D Supr & Eng	9	113,357	55,886	25,925	7,244	7,130	748	3,775	12,539
6016	Or Mn T&D Maint Lab	7	413,068	153,248	136,726	48,122	44,240	5,163	8,757	16,812
6016	Or Mn Services Lab	11	248,823	194,828	31,401	1,294	3,359	25	17,816	0
6016	Or Mn Meters Lab	10	63,867	45,184	14,312	1,522	2,885	64	0	0
6016	Or Mn Hydrants Lab	21	72,167	0	0	0	0	0	0	0
6206	Or Mn Other T&D Plant Lab	9	906	447	207	68	57	6	30	101
6356	Or Mn T&D Struct & Imp-Mat	7	539,714	200,234	178,645	62,877	57,803	6,746	11,442	21,566
6506	Other T & D Maint Contract Services	9	642	317	147	41	40	4	21	72
6756	Td Maint Transportation	9	52,682	25,982	12,051	3,367	3,314	348	1,755	5,675
6756	Maps And Records Expenses	9	1,075	530	246	68	68	7	36	120
6756	Or Mn Meters Mat	10	1,726	1,225	388	41	70	2	0	0
	Subtotal Transmission & Distribution		2,926,418	1,432,351	788,058	227,559	225,806	23,109	56,424	160,090
Customer Accounting Expenses										
6017	Meter Reading Labor	13	448,685	389,818	53,169	1,301	4,352	45	0	0
6017	Contracts & Orders Labor	12	280,051	250,720	34,197	841	2,813	29	1,362	58
6047	Billing & Accounting Salaries	12	22,843	19,745	2,693	66	222	2	110	5
6207	Employee Benefits Ca	12	200	173	24	1	2	0	1	0
6327	Misc Ca Expenses-Current	12	24,594	21,256	2,900	71	239	2	118	5
6327	Ca Contract Services	12	814	704	96	2	8	0	4	0
6427	Other Ca Contract Services	12	106,671	92,206	12,577	309	1,035	11	512	21
6507	Ca Rents	12	675	583	80	2	7	0	3	0
6707	Ca Transportation	12	3,645	3,151	430	11	35	0	17	1
6757	Uncollectible Accounts	12	280,644	242,589	33,088	814	2,722	28	1,347	56
6757	Meter Reading Expenses	13	1,599	1,386	189	5	16	0	0	0
6757	Collecting Expenses	12	40,940	35,386	4,827	119	397	4	197	8
6757	Billing & Accounting Computer	12	106,288	91,876	12,531	308	1,031	11	510	21
6757	Cust Acctg Billing/Telephone	12	1,023	864	121	3	10	0	5	0
6757	Cust Acctg Billing/Postage	12	261,304	225,871	30,808	788	2,535	26	1,254	52
6757	Misc Cust Acctg Expenses	12	439	379	52	-1	4	0	-2	0
6757	Misc Oper Ca Cust Serv	12	117	101	14	0	1	0	1	0
	Subtotal Customer Accounting		1,589,685	1,378,078	187,692	4,610	15,421	158	5,469	227

ALLOCATION OF COST OF SERVICE TO CUSTOMER CLASSIFICATIONS
FOR THE TWELVE MONTHS ENDED JULY 31, 2002

TENNESSEE-AMERICAN WATER COMPANY

Account Number	Account Description	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Other Public Authority	Other Water Utilities	Private Fire Production	Public Fire Production
-1	-2	-3	-4	-5	-6	-7	-8	-9	-10	-11
6018	Administrative and General Expenses									
6048	Adm & General Salaries	14	1,090,032	598,210	258,665	95,180	68,653	23,000	13,298	32,047
6205	Employee Pensions & Benefits	15	2,048,940	1,101,100	486,902	183,995	131,952	46,306	26,226	68,458
6328	Or Mtn General Ag Plant	14	1,224	672	280	107	78	26	15	36
6338	Contract Services - Auditing	14	20,186	11,078	4,790	1,762	1,290	426	246	593
6348	Contract Services - Legal	14	45,557	25,002	10,811	3,977	2,911	961	558	1,339
6348	Management Fees - Water Quality	1	123,000	38,192	35,178	27,908	11,378	9,742	208	394
6348	Management Fees - Cust. Billing/Service	12	617,000	533,335	72,744	1,789	5,985	62	2,962	123
6348	Management Fees - Administration	14	1,767,276	899,861	419,375	154,283	112,929	37,290	21,561	51,858
6358	Contract Services - Other	14	14,221	7,804	3,375	1,241	909	300	173	418
6428	Adm & General Rents	14	23,408	12,846	5,555	2,044	1,486	484	286	688
6508	Ag Transportation	14	251,198	137,857	59,609	21,930	16,052	5,300	3,065	7,385
6578	General Liability	14	375,670	208,168	88,146	32,796	24,005	7,927	4,593	11,045
6588	Workmen's Comp Premium Exp	15	130,546	70,155	31,214	11,723	8,407	2,960	1,671	4,428
6608	Insurance Other	14	203,470	111,864	48,283	17,783	13,002	4,293	2,482	5,982
6608	Advertising Exp	14	97,562	53,558	23,159	8,520	6,236	2,059	1,191	2,869
6758	Regulatory Commission Expenses	18	83,000	40,205	21,057	8,532	6,042	2,075	1,361	3,743
6758	Expenses Of Employees	15	22,417	12,047	5,360	2,013	1,444	507	287	760
6758	Misc Office Expenses	14	215,470	118,250	51,131	18,811	13,769	4,546	2,629	6,335
6758	Injuries & Damages Exp	14	11,223	6,159	2,663	980	717	237	137	330
6758	Research & Dev-Service Co	14	467	273	118	43	32	10	6	15
6758	Or Mtn A&G Stuc & Imp Mat	14	21,362	11,740	5,076	1,868	1,367	451	261	629
6758	Miscellaneous General Exp	14	520,510	285,655	123,517	45,441	33,261	10,963	6,350	15,303
	Subtotal Administrative and General		7,683,829	4,351,852	1,761,016	642,687	462,915	159,945	89,555	215,677
	Total Operation & Maintenance Expenses		16,147,467	8,602,672	3,898,386	1,506,740	1,086,203	357,138	187,400	458,970

DEPRECIATION EXPENSE

303.99	Intangible									
	Comprehensive Planning Study	14	81,026	44,467	19,227	7,074	5,178	1,710	989	2,382
303.00	Source of Supply									
304.53	Land & Land Rights	2	0	0	0	0	0	0	0	0
305.20	Miscellaneous Structures	2	21,809	7,153	6,372	4,365	2,061	1,584	24	50
309.00	Lakes, Rivers, & Other Intakes	2	9,569	3,167	2,822	1,933	913	701	11	22
	Other P&E SS	2	505	167	149	102	48	37	1	1
304.22	Pumping Equipment									
	Pumping Structures	6	71,094	23,447	20,895	13,565	6,754	4,714	593	1,138
	Lookout Mountain Tariff	19	528	435	76	0	17	0	0	0
	Lakeview Tariff	20	648	534	108	0	6	0	0	0
310.20	Power Generation Equipment	6	7,844	2,521	2,247	1,458	728	507	63	122
311.22	Electric Pumping Equipment	6	90,500	28,847	28,598	17,267	8,586	6,000	742	1,448
	Lookout Mountain Tariff	19	5,937	4,881	849	0	187	0	0	0
	Lakeview Tariff	20	1,490	1,228	248	0	15	0	0	0
311.23	Diesel Pumping Equipment	6	2,350	775	691	448	223	156	19	38
311.27	Other Pumping Equipment	6	203	67	60	39	19	13	2	3

TENNESSEE-AMERICAN WATER COMPANY

ALLOCATION OF COST OF SERVICE TO CUSTOMER CLASSIFICATIONS
FOR THE TWELVE MONTHS ENDED JULY 31, 2002

Account Number	Account Description	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Other Public Authority	Other Water Utilities	Private Fire Protection	Public Fire Protection
-1	-2	-3	-4	-5	-6	-7	-8	-9	-10	-11
303.00	Water Treatment									
304.31	Land & Land Rights	2	0	0	0	0	0	0	0	0
304.32	Water Treatment Structures	2	77,972	25,809	22,984	15,750	7,439	5,715	86	179
320.31	Water Treatment Structures-Painting	2	170,079	56,296	50,158	34,356	16,228	12,467	187	391
320.33	Water Treatment Equipment	2	522,628	173,056	154,182	105,811	49,878	38,323	575	1,203
	Granular Activated Carbon	2	0	0	0	0	0	0	0	0
303.00	Transmission & Distribution									
304.40	Land & Land Rights	7	0	0	0	0	0	0	0	0
330.41	T & D Structures	7	17,842	6,545	5,840	2,055	1,889	221	374	718
	T & D Reservoirs & Standpipes	5	82,842	26,244	23,395	15,119	7,572	5,277	1,789	3,446
	Lookout Mountain Tariff	19	3,484	2,970	498	0	115	0	0	0
	Lakeview Tariff	20	821	676	136	0	8	0	0	0
330.42	T & D Reservoirs & Standpipes-Painting	5	108,064	34,235	30,517	19,722	9,877	6,884	2,334	4,495
330.43	Lookout Mountain Tariff	19	4,086	3,375	586	0	136	0	0	0
331.40	Elevated Tanks & Standpipes	5	2,922	926	825	533	267	186	63	122
331.41	T & D Mains not Classified	11	43,103	33,787	5,440	224	582	4	3,066	0
331.44	T & D Mains - Mains (4" or less)	11	60,866	47,682	7,681	317	822	6	4,358	0
331.42	T & D Mains - Mains (6" - 8")	4	5,125	1,953	1,742	510	564	0	122	234
331.45	T & D Mains - Mains (10" - 16")	4	642,041	244,617	218,230	63,947	70,825	0	15,281	29,341
331.43	T & D Mains - Mains (12" or More)	3	18,087	6,178	5,501	3,770	1,779	1,369	168	323
333.40	Services	3	285,312	92,355	82,227	56,349	26,591	20,457	2,511	4,822
334.41	Meters	11	321,036	251,500	40,515	1,669	4,334	32	22,986	0
334.42	Meters-Metal Case/Old Style	10	23,742	16,850	5,337	567	964	24	0	0
334.43	Meters - Plastic Case	10	0	0	0	0	0	0	0	0
334.44	Meters - Metal Case/New Style	10	14,064	9,981	3,162	336	571	14	0	0
334.45	Meter Installations	10	1,258	399	42	42	72	2	0	0
335.40	Hydrants	10	103,942	73,768	23,366	2,484	4,220	104	0	0
		21	127,499	0	0	0	0	0	0	127,499
303.00	General Plant									
304.51	Land & Land Rights	14	0	0	0	0	0	0	0	0
304.52	Office Structures	14	6,031	3,310	1,431	527	385	127	74	177
340.51	Stores, Shop, & Garage Structures	14	14,868	6,160	3,528	1,298	950	314	181	437
340.53	Office Furniture	14	14,169	7,776	3,362	1,237	905	298	173	417
340.56	Computer & Peripheral Equipment	14	381,106	198,175	85,690	31,525	23,075	7,619	4,405	10,617
340.57	Computer & Periph Personal	14	193,468	108,175	45,910	16,890	12,363	4,082	2,360	5,688
340.57	Computer & Periph Other	14	13,375	7,340	3,174	1,168	855	282	163	393
340.55	Computer Software	14	186,850	91,566	36,594	14,566	10,662	3,521	2,036	4,905
340.58	Computer Software Personal	14	51,040	28,010	12,112	4,456	3,261	1,077	623	1,501
340.59	Computer Software Other	14	28,445	15,611	6,750	2,483	1,818	600	347	836
340.54	Other Office Equipment	14	5,584	3,064	1,325	487	357	118	68	164
341.52	Light Trucks	14	104,282	57,229	24,746	9,104	6,064	2,200	1,272	3,066
341.53	Heavy Trucks	14	69,654	38,225	16,529	6,061	4,451	1,470	850	2,048
341.54	Automobiles	14	17,264	9,473	4,097	1,507	1,103	364	211	508
341.55	Transportation-Other	14	248	136	59	22	16	5	3	7
342.50	Stores Equipment	14	2,161	1,165	513	189	138	46	26	64
343.50	Tools, Shop, & Garage Equipment	14	30,089	16,512	7,140	2,627	1,923	635	357	885
344.50	Laboratory Equipment	2	37,090	12,273	10,905	7,490	3,537	2,718	41	85
345.50	Power Operated Equipment	14	20,754	11,390	4,925	1,812	1,328	438	253	610
346.51	Communication Equipment	14	20,791	11,409	4,934	1,815	1,329	439	254	611
346.53	Communication Equipment-Telephone	14	26,281	14,423	6,236	2,294	1,879	555	321	773
347.51	Miscellaneous Structures	14	8,094	4,441	1,921	707	517	171	89	238
	Total Depreciation Expense		4,123,077	1,874,523	1,047,982	477,897	306,600	133,587	70,481	212,007

Exhibit 3

TENNESSEE-AMERICAN WATER COMPANY

REVENUE AT PRESENT, TAWC and CMA PROPOSED RATES

<u>Line</u>	<u>Description</u>	<u>Present Rates (1)</u>	<u>TAWC Proposed Rates (2)</u>	<u>CMA Proposed Rates (3)</u>	<u>Increase</u>	
					<u>Amount (4)</u>	<u>Percentage (5)</u>
1	Residential	\$ 12,026,923	\$ 13,965,820	\$ 14,347,898	\$ 2,320,975	19.3%
2	Commercial	\$ 9,180,456	\$ 10,296,191	\$ 9,435,141	\$ 254,685	2.8%
3	Industrial	\$ 3,537,807	\$ 3,800,603	\$ 3,540,893	\$ 3,086	0.1%
4	Other Public Authority	\$ 2,345,803	\$ 2,614,469	\$ 2,359,085	\$ 13,282	0.6%
5	Other Water Utilities	\$ 856,218	\$ 987,768	\$ 856,458	\$ 240	0.0%
6	Private Fire Protection	1,117,875	1,117,875	1,117,875	\$ -	0.0%
7	Public Fire Protection	256,049	368,375	368,375	\$ 112,326	43.9%
8	Total Sales of Water	\$ 29,321,132	\$ 33,151,102	\$ 32,025,725	\$ 2,704,593	9.22%

TENNESSEE-AMERICAN WATER COMPANY

Exhibit MPG-1
Schedule 3
Page 2

Present and Company Proposed Rates

<u>Line</u>	<u>Description</u>	<u>Present Rates (2)</u>	<u>TAWC Proposed Rates (4)</u>	<u>CMA Proposed Rates (6)</u>
Chattanooga District				
Customer Charge:				
1	5/8 Inch Meter	\$ 8.26	\$ 10.00	\$ 11.35
2	3/4 Inch Meter	13.86	15.00	15.00
3	1 Inch Meter	23.07	25.00	25.00
4	1 1/2 Inch Meter	46.18	50.00	48.00
5	2 Inch Meter	73.86	80.00	75.00
6	3 Inch Meter	138.50	150.00	140.00
7	4 Inch Meter	230.83	250.00	240.00
8	6 Inch Meter	461.67	500.00	475.00
9	8 Inch Meter	738.67	800.00	750.00
Volumetric Charges:				
11	First 400 CF	\$ 0.149	\$ 0.205	\$ 0.209
12	Next 6,100 CF	2.436	2.729	2.436
13	Next 43,500 CF	1.540	1.741	1.540
14	Next 450,000 CF	1.139	1.286	1.139
15	Next 1,000,000 CF	0.916	0.916	0.916
16	Additional CF	0.555	0.555	0.555
Lookout Mountain District				
Customer Charge:				
1	5/8 Inch Meter	\$ 9.24	\$ 10.00	\$ 11.50
2	3/4 Inch Meter	13.86	15.00	15.00
3	1 Inch Meter	23.07	25.00	25.00
4	1 1/2 Inch Meter	46.18	50.00	48.00
5	2 Inch Meter	73.86	80.00	75.00
6	3 Inch Meter	138.50	150.00	140.00
7	4 Inch Meter	230.83	250.00	240.00
8	6 Inch Meter	461.67	500.00	475.00
9	8 Inch Meter	738.67	800.00	750.00
Volumetric Charges:				
11	First 400 CF	\$ 0.435	\$ 0.655	\$ 0.609
12	Next 6,100 CF	3.372	3.486	3.372
13	Next 43,500 CF	2.518	2.498	2.518
14	Next 450,000 CF	1.476	1.736	1.476
15	Next 1,000,000 CF	1.254	1.366	1.254
16	Additional CF	0.888	1.005	0.888

TENNESSEE-AMERICAN WATER COMPANY

Exhibit MPG-1
Schedule 3
Page 3

Present and Company Proposed Rates

<u>Line</u>	<u>Description</u>	<u>Present Rates (2)</u>	<u>TAWC Proposed Rates (4)</u>	<u>CMA Proposed Rates (6)</u>
Lakeview District				
Customer Charge:				
1	5/8 Inch Meter	\$ 9.24	\$ 10.00	\$ 11.50
2	3/4 Inch Meter	13.86	15.00	15.00
3	1 Inch Meter	23.07	25.00	25.00
4	1 1/2 Inch Meter	46.18	50.00	48.00
5	2 Inch Meter	73.86	80.00	75.00
6	3 Inch Meter	138.50	150.00	140.00
7	4 Inch Meter	230.83	250.00	240.00
8	6 Inch Meter	461.67	500.00	475.00
9	8 Inch Meter	738.67	800.00	750.00
Volumetric Charges:				
11	First 400 CF	\$ 0.149	\$ 0.343	\$ 0.209
12	Next 6,100 CF	3.085	2.997	3.085
13	Next 43,500 CF	2.230	2.009	2.230
14	Next 450,000 CF	1.189	1.424	1.189
15	Next 1,000,000 CF	0.968	1.054	0.968
16	Additional CF	0.608	0.693	0.608
Other Water Utilities:				
	Ft. Oglethorpe Block	0.7125	0.8230	0.7125
Private Fire Service:				
1	1 Inch Meter	\$ 21.60	\$ 21.60	\$ 21.60
2	1 1/2 Inch Meter	48.72	48.72	48.72
3	2 Inch Meter	86.64	86.64	86.64
4	2 1/2 Inch Meter	132.12	132.12	132.12
5	3 Inch Meter	194.76	194.76	194.76
6	4 Inch Meter	390.00	390.00	390.00
7	6 Inch Meter	779.40	779.40	779.40
8	8 Inch Meter	1,560.12	1,560.12	1,560.12
9	10 Inch Meter	2,340.36	2,340.36	2,340.36
10	12 Inch Meter	3,120.72	3,120.72	3,120.72
Public Fire Service:				
1	Ridgeside	\$ 1,849.92	\$ 2,092.00	\$ 2,092.00
2	Public Fire	50.00	73.53	73.53

Direct Testimony of Craig Cantrell

Q. Please state your name, Company's name, business address and your occupation.

A. Craig Cantrell, Plant Manager, Velsicol Chemical Corporation, 4902 Central Avenue, Chattanooga, Tennessee 37410.

Q. What are your principal responsibilities as Plant Manager of Velsicol?

A. I am administratively responsible for the safe and efficient performance of the facilities, employees and operations of the Chattanooga site. In simpler terms, I am responsible for any and all activities, spending and performance issues that occur at the Chattanooga facility.

Q. Please outline your educational and professional training and experience.

A. I received a Bachelor of Science and Chemical Engineering degree in 1990 from the University of Alabama. I also have an Associate of Science-Engineering degree from Albert P. Brewer State Jr. College and an Associate of Science-Math degree from Albert P. Brewer State Jr. College that I received in 1987. I have worked in the chemical industry for 16 years, including employment with Tenneco Gas & Methanol; Enron Methanol; and Velsicol Chemical Corporation. I have been employed by Velsicol for 9½ years and have spent over five years as a Plant Manager in either Houston, Texas or Chattanooga, Tennessee.

Q. Have you previously submitted testimony for the Chattanooga Manufacturer's Association ("CMA") Intervention Group to this Authority?

A. No.

Q. Have you held positions in any trade associations that involved water or utility issues?

A. No.

Q. Does your company have a facility located in Hamilton County, Tennessee that utilizes water supplied by Tennessee-American Water Company ("TAWC")?

A. Yes. The plant is located at 4902 Central Avenue in Chattanooga. The site encompasses over 45 acres of land. There are 85 employees at the site currently. Velsicol Chemical has been operating from this location since 1967.

Q. What is the subject of your testimony?

A. The purpose of my testimony is to oppose the water rate increase proposed by Tennessee-American Water Company on users in Hamilton County.

Q. Have you prepared any exhibits to accompany your testimony?

A. I do not have any exhibits at this time.

Q. Please describe your company's use of water in its manufacturing and production processes in Chattanooga.

A. Water is used in a variety of ways at Velsicol. It is used as a media to absorb chemicals from process vent gas streams, to make solutions with bulk dry chemicals for processing needs, for cleaning and PH adjustment of our products, and as a heat exchange medium. Water is also used to clean our process equipment areas.

Q. How much water is used in your production/manufacturing facility?

A. Velsicol has used 260,966 million gallons over the last 16 months. That equates to 16,310 million gallons per month over that time frame, or an approximated daily average of about one-half million gallons per day (544,000/gpd).

Q. Does your company have an alternative material to use in the production processes currently supplied by TAWC water?

A. Velsicol does not have an alternative material to use in the plant currently.

Q. **Does your company have the ability to bypass TAWC's water lines?**

A. We do not have a means to bypass TAWC lines other than trucking water in.

Q. **Please explain.**

A. Drilling wells is not an option at this site. The best alternative Velsicol could explore to further reduce our TAWC usage are options of recycling. We have looked at that option previously, and it is extremely capital intensive. Alternatively, we would have to truck water which is really cost prohibitive.

Q. **Does your company switch back and forth between TAWC water and an alternative source on a regular basis?**

A. No.

Q. **So TAWC water is a necessary raw material your company must use?**

A. Yes, essentially.

Q. **Describe the impacts on your facility or production processes that the Tennessee-American Water Company's proposed pricing will have if approved by the Tennessee Regulatory Authority.**

A. We are being asked to take unjustified price increase to help their economics while we are struggling in a difficult economic climate ourselves. Financially, the impact is approximately \$40,000.00 per year. Our Company essentially had zero earnings last year, and we continue to face a variety of challenges in 2003. The Chattanooga plant has undergone three (3) personnel reorganizations within the last two years to try to maintain competitiveness. Spending and usage is scrutinized daily, weekly and monthly in a variety of means throughout the hierarchy of the plant, and Company, to ensure we are meeting our goals. TAWC's proposed increase as it stands now could only be managed by elimination of cost

somewhere else. Whether that is in wages or in spending to vendors, it will impact negatively the plant and our local economy.

Q. Would there be any other impacts?

17. Additionally, the Chattanooga plant makes the raw material in one unit that supplies the three other operating units on-site and the Velsicol plant in Chestertown, Maryland. Both operating facilities would be adversely impacted if the pricing, as proposed, is increased or if a shut down or production curtailment occurred. That one operating unit is a primary TAWC water user at Velsicol's Chattanooga plant. The economics of sustaining the operations of that unit are already borderline. TAWC's requested increase, if granted, would further help to drive the economics in favor of shutting down that unit of the Chattanooga plant. Approximately thirty percent (30%) of the plant employees would be eliminated if this unit shuts down.

Q. From your point of view would Tennessee-American Water Company's petition constitute an appropriate water delivery service pricing policy for the State of Tennessee?

A. No. When Velsicol expands a unit and incurs the capital expenditures to meet a potential growing need and that opportunity or growth does not occur, Velsicol cannot remain competitive by passing along those costs to our customers. A small to moderate price increase may occur in places, but ultimately Velsicol must responsibly and appropriately change its internal cost structure to sustain our viability and sometimes forego recouping those costs. In this case, TAWC has lost volume due to business shutdowns and has expanded capacity in recent years. They now have higher costs of operation due to those expenditures. Since they can and do monopolize the water utility in Chattanooga, they are

attempting to pass this on to their customer base to maintain their profit level. I understand there has not been a price increase in several years. This does not mean TAWC has the right or privilege of trying to compensate for that issue by asking for this level of rate increase, which may simply lead to further shutdowns and, thus, more rate increases.

Q. Would your Chattanooga facility operate at a competitive disadvantage if Tennessee-American Water Company's proposed price increase was implemented?

A. Yes. We are continually facing external pressures in the global market, especially from foreign competitors, that makes competition difficult. Velsicol's Chattanooga plant has lost 103 jobs in the last seven years due to these changing economic pressures. We are trying to sustain operations and keep jobs in Tennessee and in Hamilton County where we have been operating for 36 years. Now we face another challenge implemented ultimately by a foreign company, this time on American soil, that will further weaken our economic structure.

Q. Is there anything else you believe we need to discuss about the price increase?

A. Yes. This level of rate increase could cause a unit shutdown for Velsicol as mentioned previously in my testimony. Other industrial users will be facing the same issues or moving production to other facilities they have in the U.S. or overseas. A price increase will create an environment that could cause production cutbacks and the further loss of jobs in Chattanooga, especially if any increase that may be allowed by TRA is not allocated fairly based upon the cost of service to various customer classes. Production cutbacks will create lost revenues to local businesses, and again put TAWC into the position of needing another rate increase to cover their newly created revenue losses.

Q. Does this conclude your testimony?

A. Yes. I respectfully ask that you consider these factors in your deliberation.

Direct Testimony of Dan Nuckolls

Q. Please state your name, business address and occupation.

A. I am Dan Nuckolls, Director of Operations and Maintenance for Koch Foods, LLC. My business address is 1835 Kerr Street, Chattanooga, Tennessee 37401.

Q. What are your principal responsibilities as Director of Operations and Maintenance of Koch Foods, LLC?

A. I am responsible for all plant operations, plant maintenance, export logistics and special projects involving my company's production facility in Chattanooga and feed mill in Hamilton County, just outside of the Chattanooga city limits.

Q. Please outline your educational and professional training and experience.

A. I received a Bachelor of Business Administration degree with an emphasis in management from West Georgia State University. I also have an Associate's degree in Architectural Engineering Technology from Southern Tech in Marietta, Georgia. I have worked in the poultry industry for 21 years with the following companies: Con-Agra, Seaboard Farms and Koch Foods. I have been with my present company, Koch Foods, for almost six years. I have been titled as Director of Operations and Maintenance at Koch Foods, LLC's Chattanooga facility since 2002.

Q. Have you previously submitted testimony for the Chattanooga Manufacturer's Association ("CMA") Intervention Group to this Authority?

A. No, I have not.

Q. What is the subject of your testimony?

A. I will present information opposing the Tennessee-American Water Company's petition to increase water rates.

Q. **Have you prepared any exhibits to accompany your testimony?**

A. No.

Q. **Have you held positions in any trade associations that involved water or utility issues?**

A. No.

Q. **Does your company have a facility located in Hamilton County, Tennessee that utilizes water supplied by Tennessee-American Water Company ("TAWC")?**

A. Yes. Koch Foods has two facilities located in Hamilton County, Tennessee that employ 265 people. The production facility in Chattanooga has been in operation since March, 1996, and the Chattanooga facility has been in existence for over 40 years (as Koch or a predecessor). Our company has facilities in five states other than Tennessee, and the Tennessee operations generate about \$300 million per year in economic impact for the state economy.

Q. **Please describe the type of labor that your company uses in its manufacturing and production processes in Chattanooga.**

A. Our company provides jobs for lower skill levels requiring a high school education or less, as well as very technical occupations and careers requiring college and post-graduate degrees.

Q. **Please describe your company's use of water in its manufacturing and production processes in Chattanooga.**

A. Koch Foods utilizes approximately 1.2 million gallons of water per day in its manufacturing and production processes. Water is used in the process of poultry slaughter, for cleaning and chilling of our products, and for purposes of sanitizing the production facility.

Q. **How much TAWC water is used in your Chattanooga production facility?**

A. Koch Foods utilizes approximately 1.2 million gallons per day as noted above, which equates to almost one-half billion gallons annually.

Q. **Does your company have an alternative material to use for the production processes and other operations currently supplied by TAWC water?**

A. No.

Q. **Please explain.**

17. The United States Department of Agriculture requirements mandate the use of water meeting regulatory guidelines in various stages of our operations. Due to the high volume of water usage, while some alternatives may be available to reduce our TAWC water intake, there would never be a truly competitive alternative to the use of TAWC water in our facility.

Q. **Is water the cleanest, most efficient raw material your company can use?**

A. Yes.

Q. **Does your company have the ability to bypass TAWC's water lines?**

A. No.

Q. **Do you understand that the water company does not want you to reduce the amount of water usage, or invest in a reduction technology, but instead wants to raise the price you would pay for water so that the economics would be equivalent?**

A. Yes, that is my understanding.

Q. **Describe the impacts on your facility or production processes that the Tennessee-American Water Company's proposed pricing will have if approved by the Tennessee Regulatory Authority.**

A. The poultry industry has been operating on slim to non-existent margins for several years. An increase in the water rates will only add to the hardships of operating successfully in the

food production industry. Koch Foods is involved in a pure commodity- based industry and does not have the luxury of simply raising its prices in an equivalent manner to the production cost increases it will experience if the water rates are allowed to be raised as requested by Tennessee-American Water Company.

Q. From your point of view would Tennessee-American Water Company's petition constitute an appropriate water delivery service pricing policy for the State of Tennessee?

A. No, not in all respects. I can understand the rising costs of doing business - we fight it daily. However, I cannot understand the proposed increase at the levels requested. If a nonmonopoly provider attempted such an overall rate increase, then I would immediately search out a new supplier. Unfortunately, TAWC is the only delivery company in town unless my company could build its own pipeline or drill its own well to supply adequate water. I cannot imagine why the State of Tennessee would want to foster widespread bypass activity or increased recycling/reuse activities by those that have the ability to do so. Nor can I understand why or how a monopoly would ever be allowed to abuse an exclusive franchise.

Q. Are there any other impacts to your production facility that will result from a price increase for water rates?

A. Of course, if water costs increase, then our facility will investigate further the potential investment of capital to reduce water intake as much as possible. While Koch Foods seeks to operate as efficiently as possible, it would not foreclose an opportunity to further reduce water intake to the Chattanooga production facility if analysis indicated such an investment would be feasible and more beneficial than water usage in the long term.

Q. Would your Chattanooga facility operate at a competitive disadvantage if Tennessee-American Water Company's proposed price increase was implemented?

A. Yes. Increased water rates would immediately put my facility at a disadvantage considering the amount of water used and the very tight margins in the poultry industry.

Q. Please explain.

A. Certainly. Koch Foods has invested a significant amount of money in the Chattanooga, Tennessee operation. Of course, we would like to continue to attract additional investment in this production facility; however, to the extent that the margins are lowered or extinguished due to increased water costs, then capital investment and jobs would not be assigned or implemented in the Chattanooga facility but could go elsewhere, including any of the five other states in which Koch Foods already operates or to another state.

Q. Assuming that some rate increase is granted by the TRA to Tennessee-American Water Company, how do you believe that increase should be allocated?

A. I believe that each class of customers should pay its fair share for actual water usage, based upon what it costs to actually provide service to the customer. I do not believe any customer class should subsidize another customer class.

Q. Does this complete your testimony in this rate increase proceeding?

A. Yes.

Direct Testimony of Randy Crowder

Q. Please state your name, business address and occupation.

A. I am Randy Crowder, Quality Assurance Manager of R. L. Stowe Mills, Inc. My business address is 1101 South Watkins Street, Chattanooga, Tennessee 37404.

Q. What are your principal responsibilities as Quality Assurance Manager of R. L. Stowe Mills, Inc.?

1. I am principally responsible for establishing, setting and monitoring the quality specifications of the production units and final product at our facility. I report to and work with the division president, various facility managers and our customers. I am tasked with and have significant knowledge of the effects of utility rates and other costs involved in our production processes.

Q. Please outline your educational and professional training and experience.

A. I received a Bachelor of Science degree in textile engineering from Southern Tech in Marietta, Georgia in 1981. I have worked in the textile industry for 22 years. I was initially employed by Dixie Yarns/Dixie Group from 1981 until the plant was sold to R. L. Stowe Mills in 1999. I was the Industrial Engineering Manager for Dixie Yarns/Dixie Group from 1981 to 1993, and was also a Quality Assurance Manager for that company from 1993 to 1999. I have been at R. L. Stowe Mills since 1999 in my current capacity as Quality Assurance Manager.

Q. Have you previously submitted testimony for the Chattanooga Manufacturer's Association ("CMA") Intervention Group to this Authority?

A. No.

Q. What is the subject of your testimony?

A. I will present information opposing the Tennessee-American Water Company's petition to increase the water rates it charges customers.

Q. Have you prepared any exhibits to accompany your testimony?

A. No.

Q. Have you held positions in any trade associations that involved water or utility issues?

A. No.

Q. Does your company have a facility located in Hamilton County, Tennessee that utilizes water supplied by Tennessee-American Water Company ("TAWC")?

A. Yes. R. L. Stowe Mills has two facilities located in Hamilton County, Tennessee that employ over 450 people, both plants being inside the Chattanooga city limits. My company is in the business of mercerizing yarn and also in the business of applying color/dyes to natural yarn. R. L. Stowe Mills manufactures and produces the colored yarn for the textile and apparel industries, and its customer base is primarily located in North America and Central America. The company's facility on South Watkins Street in Chattanooga, Tennessee is arguably the most modern facility in the United States producing dyed yarn for resale.

Q. Please describe your company's use of water in its manufacturing and production processes in your Chattanooga plants.

A. Water is a main component in the mercerizing and dyeing processes for yarn products. For example, the dyeing process requires our use of several gallons of water for every pound of yarn that is submitted to a series of processing steps in order to color natural yarn fibers for purposes of resale. In the mercerizing process, water is used to rinse the natural yarn both

before and after mercerizing. Water is also used in our facilities to rinse/sanitize facilities, for drinking water and for employee lavatory purposes.

Q. How much TAWC water is used in your Chattanooga production facilities?

A. R. L. Stowe Mills utilizes approximately one million gallons per day at its current production levels. However, we are operating at only 60% of our production capacity at the present time and, if production were to increase, our water usage would rise at least proportionately.

Q. Does your company have an alternative supply for the production processes and other operations currently supplied by TAWC water?

A. Yes, partially.

Q. Please explain.

2. R. L. Stowe Mills has a system of wells that have been installed at its facility. The company, and its predecessor, previously used blended water in some of its processes and production operations. Currently, well water or blended water is not being used. Blended water is not as efficient as a raw material because the level of "hardness" can vary and must be monitored. As the levels of hardness vary, recipes for dyes must be adjusted and the discrepancies are often times only noticed after a batch of off-quality product is produced, which requires us to re-dye that batch. I am not claiming it would be easy to reformulate recipes for dye colors, because the process of getting the right mix would be difficult and labor-intensive for the colors that our facility can produce.

Q. Are there adverse effects on your company that would be caused by switching over from TAWC water to well water or blended water, or from switching back and forth?

A. Yes. As described previously, it would require the reformulation of recipes for dye colors. Also, we would anticipate that the level of off-quality product would increase.

Q. **Has your company demonstrated that it would consider utilizing its backup as a competitive alternative to TAWC water or otherwise invest in utilizing its well system?**

A. Yes. Our well system could be used again for at least 50% of the water necessary for our current production processes, and that amount might be increased after investigation. While it would require capital investment to utilize the well system again and also would require the modification of plant and procedures to implement the use of the well systems, our company's survival literally (not figuratively) is tied to the costs imposed upon us and our production processes.

Q. **Is there any material that could be used in the dye process or mercerizing process operations of R. L. Stowe Mills instead of water?**

A. No, there is no alternative.

Q. **Does R. L. Stowe Mills have the ability to bypass TAWC's water lines?**

A. Other than the well system described above, not to my knowledge.

Q. **Do you understand that the water company does not want you to reduce the amount of water usage, invest in a reduction technology, or implement capital improvements that will reduce the amount of TAWC water used in your production processes?**

A. Yes, that is my understanding. In fact, TAWC has visited our facility and inquired about the possibility to increase our TAWC water usage.

Q. Describe the impacts on your facility or production processes that the Tennessee-American Water Company's proposed pricing will have if approved by the Tennessee Regulatory Authority.

A. The impacts would be devastating, if not fatal. One must understand that the textile supply industry in the United States has not been operating as a monopoly (such as TAWC) garnering an 8% return over the past few years. Instead, the textile and apparel fiber supply industry in which R. L. Stowe Mills is engaged has been fighting in this country to stave off elimination imposed by increasing domestic costs and foreign competition.

Q. Had R. L. Stowe Mills specifically targeted any cost reductions as goals in its attempt to remain competitive?

A. Yes, we had. There are three main costs (labor, water and power) in our manufacturing matrix. R. L. Stowe Mills was in the process of trying to reduce its water costs when this petition was filed. Our goal was to reduce our water costs two-cents per pound of yarn processed; however, if the current petition is approved, it appears that the cost per pound for TAWC water actually will rise two or three-cents per pound.

Q. If Tennessee-American Water Company's proposed price increase is implemented, would your Chattanooga facilities operate at a competitive disadvantage?

A. Absolutely. In our industry, success or failure is gauged by looking at each penny per pound of yarn sold. As noted above, if the price increase is allowed as proposed, the variance in water costs alone will be dramatic. Frankly, our entire domestic industry is now selling yarn after production at the same price levels as we did in the mid-1980's. The trend since the late- 1990's has been for the sales price of yarn after production to regress or retreat. It is a

deflationary market that we are competing in from the United States' perspective, and we face competition from others that frankly do not appear to be recognizing costs as part of their pricing structure (or they own the monopolies, such as water suppliers, integral to the industry). R. L. Stowe Mills, as a company, reflects the recent general trend in the United States for a zero percent (0%) profit margin in the textile industry. The Chattanooga facility actually operates presently at a negative margin and, if unable to reverse that trend, either through cost control or increased sales - both of which are its target goals, is subject to being eliminated.

Q. **Anything else?**

A. Yes. R. L. Stowe Mills is proud of the Chattanooga facility and must now seriously consider trying to reduce its water intake from TAWC by up to 50% in order to remain operational. Scores of suppliers for the textile and apparel industries have been forced to close in the United States. The situation simply is critical and every penny per pound of yarn produced counts dramatically. Unfortunately, a pricing schedule that makes a textile firm in the United States uncompetitive would not result in jobs moving to another state's facility, it would result in the jobs simply being eliminated in this country and, of course, to the extent we allow that to occur, we will all suffer the adverse economic impacts that result.

Q. **Assuming that some rate increase is granted by the TRA to TAWC, how do you believe that increase should be allocated?**

A. Any increase, simply put, should result in the customer base causing the increase to pay its fair share for the provision of services to that type of customer. In today's business climate

and for the companies that employ our citizens in jobs involving global market places, we cannot subsidize other customers.

Q. **Does this complete your testimony in this rate proceeding?**

A. Yes.

Direct Testimony of Ray Childers

Q. Please state your name, business address and occupation.

A. I am Ray Childers. I am President of the Chattanooga Manufacturers Association, and my business address is 1001 Market Street, Chattanooga, Tennessee 37402.

Q. What are your principal responsibilities as President of the Chattanooga Manufacturers Association (sometimes referred to as "CMA")?

A. I am responsible for the daily operations of the Chattanooga Manufacturers Association including, but not limited to, disseminating news and information regarding actions or activities that may impact or affect manufacturers' growth and economic development in Chattanooga, Hamilton County and surrounding areas in Tennessee.

Q. Please outline your educational and professional training and experience.

A. I received a Bachelor of Science (Education) degree from the University of Tennessee at Knoxville in 1962. I completed numerous post-graduate level classes at Middle Tennessee State University. I began my employment with DuPont in 1966 at its Old Hickory facility outside of Nashville, Tennessee. I also worked at DuPont's Chattanooga plant, and was employed by that fine company for 26 years. I have been President of the Chattanooga Manufacturers Association since leaving DuPont in 1992. I am also a registered lobbyist in the State of Tennessee.

Q. Have you previously submitted testimony for the Chattanooga Manufacturers Association Intervention Group to this Authority?

A. No.

Q. What is the subject of your testimony?

- A. I primarily will present testimony regarding the City of Chattanooga and Tennessee-American Water Company's resolution of the eminent domain case and the resulting order issued by the Tennessee Regulatory Authority.
- Q. **Are you aware that to settle the dispute between the City of Chattanooga and the Tennessee-American Water Company (the "Company" or "TAWC") that the Company agreed to reduce its fire hydrant rates?**
- A. Yes, it is my understanding that the Company agreed to reduce fire hydrant rates to the City of Chattanooga.
- Q. **What is your understanding of who was to bear the cost of that rate reduction?**
- A. I understood that the costs related to the dispute and the rate reduction regarding fire hydrants was to be borne by the shareholders/stockholders of the Company.
- Q. **How do you believe the TRA should handle the issue of the fire hydrant rate reduction agreement in this case?**
- A. I believe that it is inequitable, if not unconscionable, for the Company to try to renege on the promises made to the TRA, the City of Chattanooga and all TAWC ratepayers. My recollection at the time of the settlement between the City of Chattanooga and the Company, and the prior orders issued by the TRA, is that the reduction only was approved by the TRA on the condition that the Company's ratepayers would never have to pick up the tab for that lost revenue. I seem to recall that was the main issue and that all the TRA directors agreed upon that aspect, even though the panel could not agree on every issue. I believe that despite the Company's current petition and request for nearly \$4 million in increases, it is up to the current members of the TRA to stay the course, continue to enforce the prior order and

maintain its prior resolution by not allowing the Company to recover that lost revenue from any of its ratepayers. It is simply not fair to harm the ratepayers in order to benefit the Company's shareholders, especially considering the prior findings of the TRA.

Q. What impact, if any, do you believe the Company's proposed rate increase will have to economic development in the production, manufacturing and industrial sectors of the Chattanooga economy?

17. It will not help, that is certain. Chattanooga, and the State of Tennessee for that matter, is struggling to retain current and to attract new production, industry and manufacturing jobs; jobs that pay at a much greater scale on average than the typical service industry employment (and other minimum wage sectors). If the proposed increase is implemented, it will cause our manufacturers to be less competitive precisely at a time when becoming *more competitive* is essential. In addition, it will drive away long-term capital investment used for increasing production from some Chattanooga plants. And, it will cause others to reduce their intake of TAWC water through implementation or increased use of wells and recycling equipment which ultimately may lead to a reduction of input and revenue at the City-owned Moccasin Bend POTW.

Q. Does this complete your testimony in this rate increase proceeding?

A. Yes.